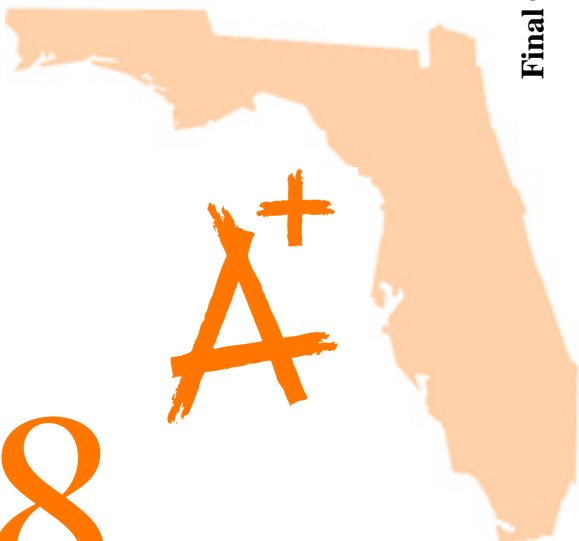
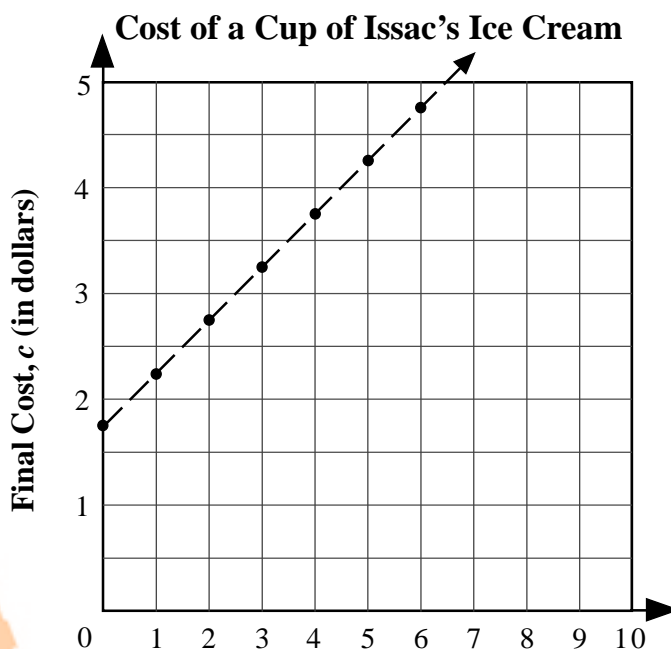
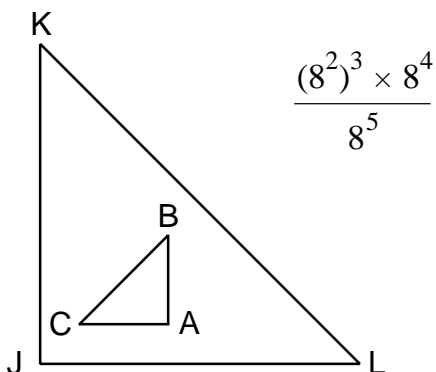


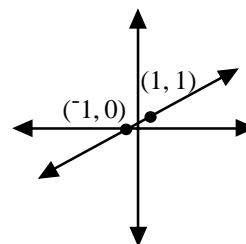
Student's Name _____

Successful Test Taking[®]

MATHEMATICS 8



8



LEADERSHIP RESOURCES[®]

2011 Edition

Successful Test Taking Mathematics 8

Dear Educator:

This sample represents only a portion of the **LEADERSHIP RESOURCES®** Successful Test Taking® Mathematics 8 preparation book (2011 Edition).

The actual book is 48 pages and has 77 multiple-choice and 23 gridded-response items. Questions are aligned with all Next Generation Sunshine State Standards and Benchmarks. The questions are written to the 2009 Item Specifications. The book is printed on newsprint, is consumable, and is sold in a set of 25 books for \$60.00.

Also included in this sample are two pages of the teacher's guide. The teacher's guide identifies the specific benchmark each question assesses.

LEADERSHIP RESOURCES® publishes preparation books for:

Grade 3 Reading, Grade 3 Mathematics,
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Successful Test Taking[®]

Mathematics 8

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2011 Edition

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OWNER/PUBLISHER:

LEADERSHIP  RESOURCES[®]

8398 Cypress Hollow Dr.

Sarasota, FL 34238

800.257.7157

fax: 941.924.6829

www.successfultesttaking.com

e-mail: successfultesttaking@gmail.com

Successful Test Taking[®]

Preface

This test taking book has been developed to help you take a mathematics test, as well as review strategies you already use in math.

A good test:

- A. confirms what you already know,
- B. helps you to see where you can use what you know,
- C. shows you new ideas while taking the test.

Please note that this book was made to help you learn how to prepare for and take tests. It is **not**, however, a complete model of the FCAT. This book was developed to provide you with typical items that might be tested.

Test taking is complicated. By studying tests and how they are written, you can become a better test taker. The reading and mathematics strategies you use in the classroom and in daily life can be used here as well.

As you use this book, try to do your best work. Doing your best work is a mirror of your ability and effort.

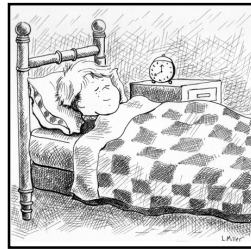
**Remember to
Use your Common Sense**

Test Taking Tips

Here are some helpful hints.

I. Before coming to school on test days:

- A. **Get some rest.** It's not very smart to try to do your best work when you are tired.



- B. **Eat something** in advance, such as cereal, toast, or fruit, and have some milk or fruit juice. You already know that a good breakfast will give you the energy you need to do well in school.



- C. **Come prepared.** You may be provided with a pencil that has an eraser, but bring one anyway. Also, bring a book or magazine to entertain yourself if you finish the test early.

- D. **Arrive on time.** Tests take energy. Don't spend all your energy rushing to get to school on time. Allow yourself plenty of time to get to school on test days.

II. When you get to school on test days:

- A. Find a comfortable place to work.
This may mean not sitting next to your friends. Remember, your goal is to do your best on the test. Sit where you can concentrate and do well.
- B. Follow along when the teacher gives the test directions. Ask your teacher to explain the directions if you do not understand them.
- C. Some tests are confusing. You may know the answer, but you must correctly fill in the bubble or the grid to get credit for your answer.
- D. Unless your teacher tells you otherwise, **mark in the test book**. Most test books will not be used again, so mark away! Do any work you need to right on the test book pages.
- E. Don't waste all of your time on one item. It is OK to skip an item and return to it later. Make it easy to find the item you skipped by circling the number of the item in the test book.
- F. If you come across an item that just seems impossible, skip it and move on. But don't give up on the whole test altogether. Some test writers put in very hard items at first. Don't let them discourage you when they do this. Keep going!
- G. For multiple-choice items, mark the **best** answer. If you are not sure of an answer, guess wisely. But don't mark just any answer. You probably already know that at least one of the answer choices is incorrect. Mark out answer choices that are clearly incorrect even if you can't completely figure out the correct answer. This will make guessing wisely easier.
- H. For gridded-response items, think and calculate carefully and then fill in the grid correctly.
- I. Review your multiple-choice answers and gridded-response answers when you are finished to make sure you have the **best** answer.
- J. Do your own work. Copying another student's answers is not right.
- K. Most tests are too long, and you will get tired. Keep at it. It may help to stretch your back and arms or look at the ceiling or out a window from time to time.
- L. Remain calm. Tests are important, but they aren't the end of the world. Do the best you can.

Successful Test Taking Strategies for Answering Multiple-Choice/Gridded-Response Items

1. Read each item carefully.
Try to get a “feel” for what the answer might be while you are reading the item.
2. Ask and answer, "What do I know?" "What am I being asked to do?"
3. For each type of item, think and calculate carefully.
4. For multiple-choice items, there will be 4 answer choices.
Look at each answer choice.
Mark out answer choices that are clearly incorrect.
If you really don't know the answer, try using each answer choice in the item.
“Plugging-in” each answer choice may help you determine the **best** answer.
5. Mark the **best** answer right in this book by filling in the circle (bubble) to the left of the answer you chose. Completely fill in only one bubble.
A correct answer is worth one point.
6. For gridded-response items, work the item and find an answer.
Write your answer in the answer boxes at the top of the grid.
Put the first digit in the left answer box, or the last digit in the right answer box.
Be sure to write a decimal point or a fraction bar or a negative sign in the answer box if it is part of the answer.
Fill in the matching bubbles under each box in which you wrote a number, a decimal point, a fraction bar, or a negative sign.
Completely fill in only one bubble below each answer box.
The correct answer will always fit in the grid.
A correct answer is worth one point.

10 Strategies for Successful Test Taking in Mathematics

Good math test takers:

1. Read the item carefully.
2. Ask, "What does the item want me to do?"
 - add, subtract, multiply, divide, estimate, measure?"
3. Ask and answer, - "What do I know?"
 - "What am I being asked to do?"
 - "What procedures do I use?"
4. Solve multiple-choice items by marking out all incorrect answer choices and then selecting the **best** answer.
5. Solve gridded-response items by thinking and calculating carefully.
6. Review multiple-choice answers and gridded-response answers to be sure they have the **best** answer.
7. If stuck, circle the item number or the entire item to return to it later for additional work.
8. Take quick stretch breaks when needed, then ask, "What am I getting ready to do next?"
9. Don't give up. Sometimes the easiest items are at the end of the test.
10. Smile and pat themselves on the back for finding the best answers.



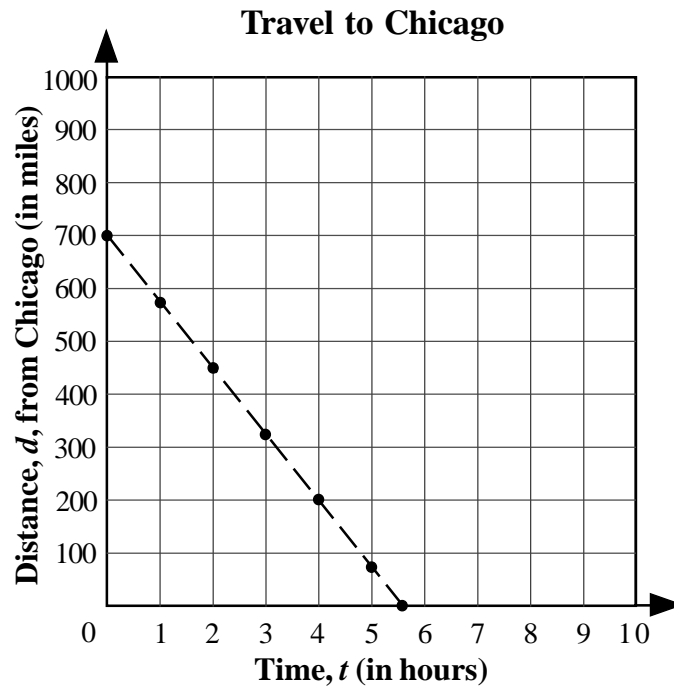
General Information for the Student:

Here are some important things to remember as you use this book:

1. For multiple-choice items, choose the **best** answer by filling in the circle (bubble) to the left of the answer you chose.
2. For gridded-response items, think and calculate carefully. Then carefully fill in the grid.
3. Mark your answers right in this book.
4. If you do not know the answer to an item, go on to the next item. You can return to that item later.
5. **CONTINUE WORKING UNTIL YOU REACH A STOP SIGN. THEN STOP.**
6. If you finish the Day One session early, you may check your work **only** in this session. Do not look ahead to the next session.

Use the information below to answer items 7, 8, and 9.

A high-speed train is getting ready to travel from New York City to Chicago, without stopping or changing its speed. The graph shows the relationship between the train's distance from Chicago and its travel time.



7 Which equation best represents the relationship shown in the graph?

- (F) $d = 700t - 125$
- (G) $d = 700 - 125t$
- (H) $d = 700t + 125$
- (I) $d = 700 + 125t$

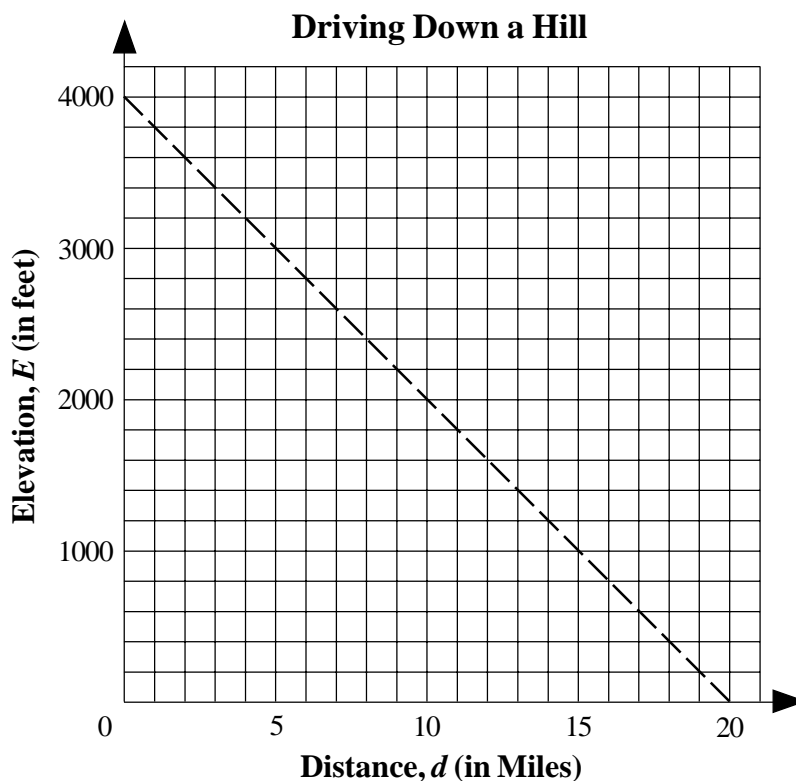
8 How far is the train from Chicago after it has traveled 3 hours?

- (A) 125 miles
- (B) 325 miles
- (C) 375 miles
- (D) 575 miles

Use the information below to answer items 13 and 14.

Santo is driving his car down a long, steep hill.

The graph below shows the linear relationship between E , the elevation above sea level (in feet) of the car when it is d miles from the top of the hill.

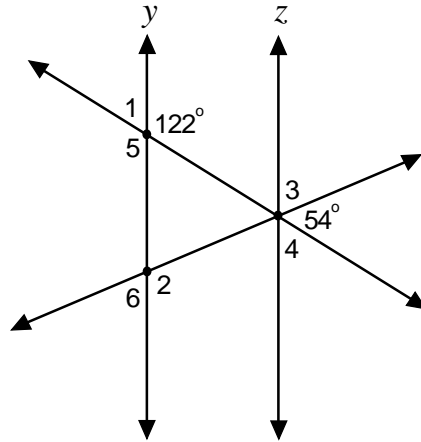


13 What does the slope of the dashed line segment represent?

- (F) For every mile Santo drives, his elevation above sea level decreases 200 feet.
- (G) For every mile Santo drives, his elevation above sea level increases 200 feet.
- (H) For every mile Santo drives, his elevation above sea level decreases 1,000 feet.
- (I) For every 5 miles Santo drives, his elevation above sea level decreases 200 feet.

Use the information below to answer items 24, 25, and 26.

In the figure below, line y is parallel to line z .
Two transversals intersect on line z , forming several angles.



24 What is the measure of angle 4?

- (F) 54°
- (G) 58°
- (H) 68°
- (I) 122°

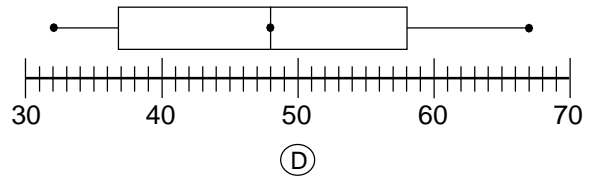
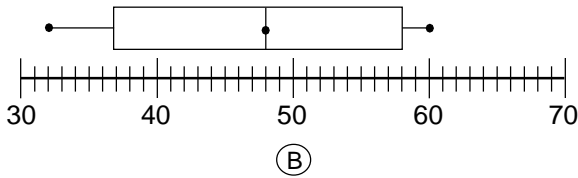
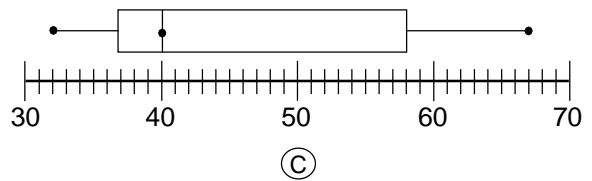
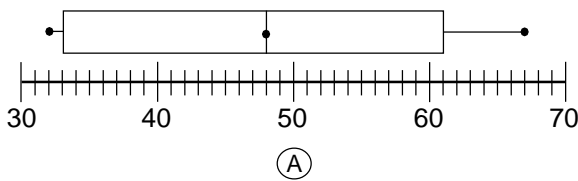
31 Mr. Ortiz bought a 24 cubic foot storage locker for a camping trip.
How many **cubic inches** are equivalent to 24 cubic feet?

-	/	/	/	/	/
●	●	●	●	●	●
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 32 Judy made this stem-and-leaf plot.

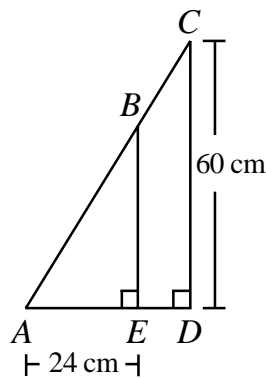
Stem	Leaf
3	2379
4	18
5	248
6	17

Which box-and-whisker plot best represents Judy's stem-and-leaf plot?



- 35 Jermain drew the figure below. Line segment ED is half the length of line segment AE . What is the length of line segment BE ?

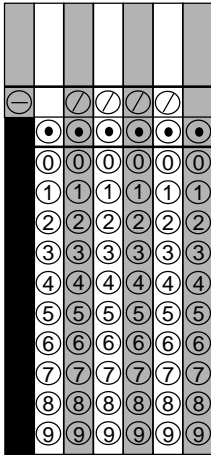
- (F) 24 cm
- (G) 36 cm
- (H) 40 cm
- (I) 50 cm



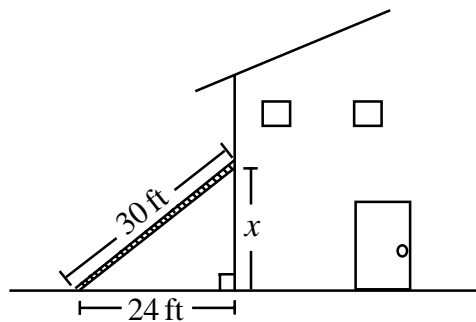
- 36 ACE Computer Company made 2.4×10^4 computers during the last week in January.

This is $\frac{1}{6}$ the total number of computers ACE Computer Company made in January.

How many computers did ACE Computer Company make in January?



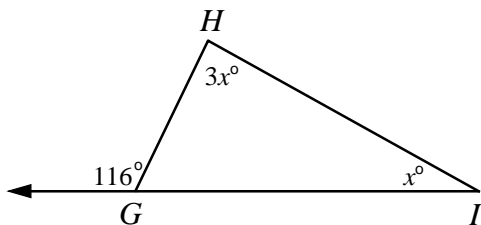
- 47 Mr. Gomez leaned a 30 foot ladder against his house, as shown below.



What is the distance (x) from the point where the ladder meets the house to the ground below?

- (A) 15 feet
- (B) 18 feet
- (C) 20 feet
- (D) 24 feet

- 55 In triangle GHI , what is the measure, in degrees, of angle H ?



⊖	⊗	⊗	⊗	⊗	⊗
●	●	●	●	●	●
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

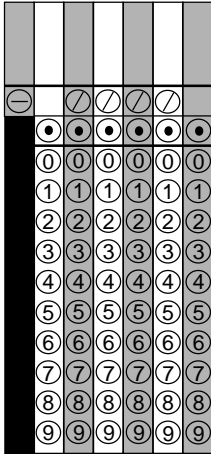
- 63 The equation below can be used to find the shoe size S of a person with a foot length of F inches.

$$S = 3F - 24$$

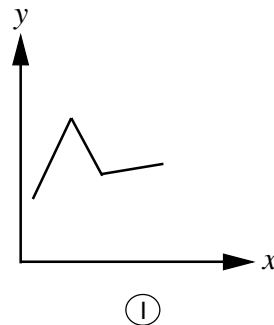
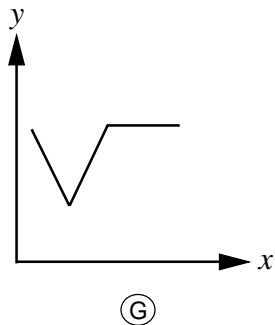
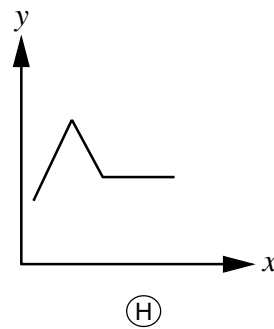
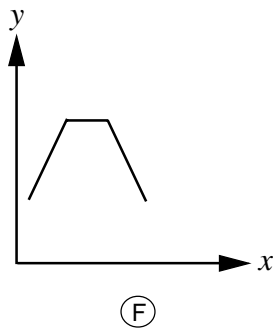
Which of the following is the same equation solved for F in terms of S ?

- (A) $F = 3S + 24$
- (B) $F = 3S \div 24$
- (C) $F = \frac{1}{3}(S + 24)$
- (D) $F = \frac{1}{3}(S - 24)$

- 72 An internet service provider signed up 4.14×10^5 new customers during the first half of the year. This was 46% of the total number of new customers the internet service provider signed up for the entire year. How many new customers did the internet service provider sign up for the entire year?



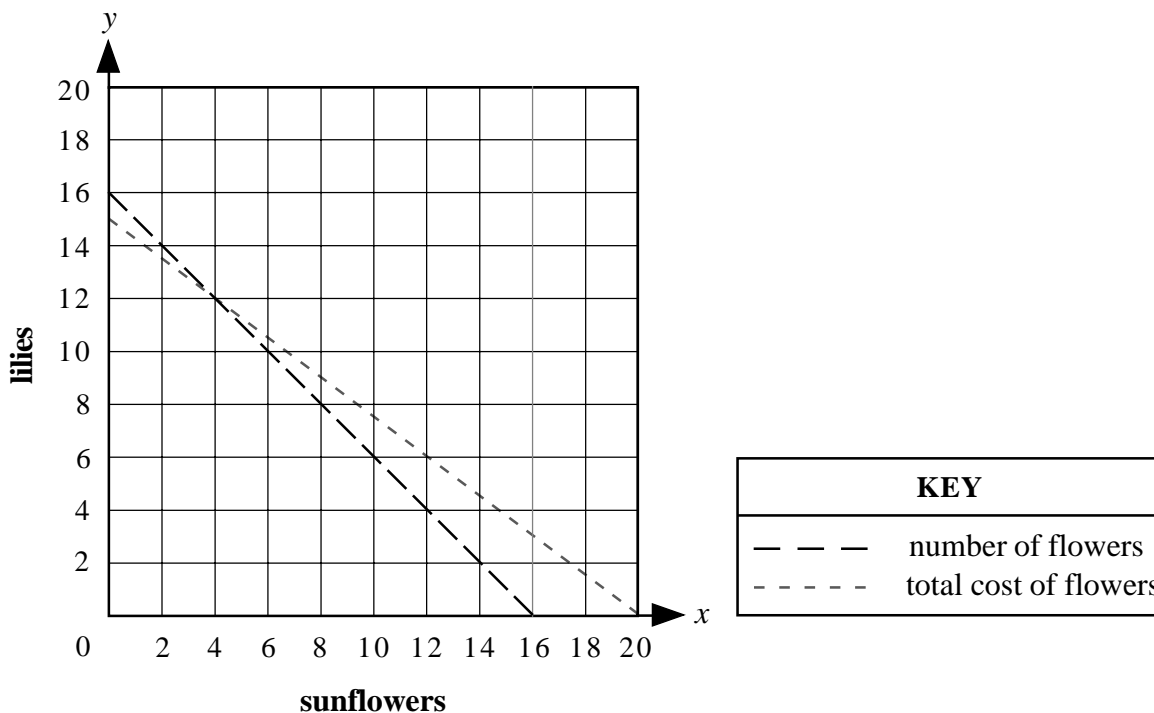
- 73 Last summer, sales of ice cream cones at Carl's Ice Cream Shop increased during June, decreased during July, and remained the same during August. Which graph best illustrates the sale of ice cream cones at Carl's Ice Cream Shop last summer?



- 79** Iris took 6 math quizzes last semester. The mean of the 6 quizzes was 81, the median 82, the mode 84, and the range 26. Iris' highest score was 94. She received an 84 twice. What of the following were Iris' quiz scores?

- (F) 68 76 80 84 84 94
- (G) 68 76 82 84 84 94
- (H) 68 72 80 84 84 94
- (I) 26 72 81 84 84 94

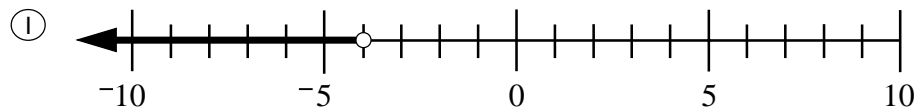
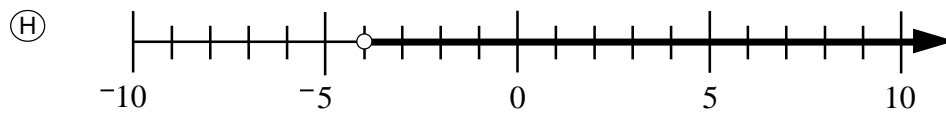
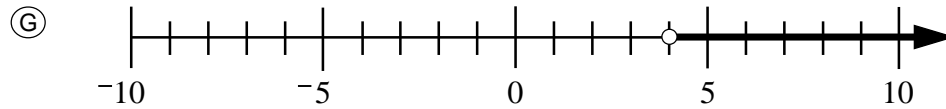
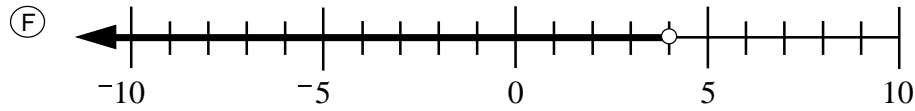
- 84** Ginger bought two kinds of flowers: sunflowers and lilies. She bought 16 flowers that cost a total of \$180. The sunflowers cost \$9 and the lilies cost \$12. The equations and the graph can be used to determine the number of each kind of flower Ginger bought, where x represents sunflowers and y represents lilies.
- Number of flowers: $x + y = 16$
 Total cost of flowers: $9x + 12y = 180$



What are the number of sunflowers and lilies Ginger bought?

- (F) 4 sunflowers; 12 lilies
- (G) 5 sunflowers; 11 lilies
- (H) 8 sunflowers; 9 lilies
- (I) 12 sunflowers; 6 lilies

96 Which number line represents the solution of this inequality? $9 - 8n > -23$



98 The floor of a square classroom at a middle school has an area of 1,500 square feet. Which is closest to the length, in feet, of each side of the floor of the classroom?

- (A) 38
- (B) 39
- (C) 375
- (D) 380

Answer Key & Teacher's Guide

Successful Test Taking® **MATHEMATICS 8**

2011 Edition

LEADERSHIP RESOURCES®


8398 Cypress Hollow Dr., Sarasota, FL 34238

800.257.7157 Fax 941.924.6829

Successful Test Taking®

This *Successful Test Taking®* Mathematics 8 book is specifically designed to assist teachers and students as they incorporate the information and skills contained in the Sunshine State Standards into their learning environment. Each item has been aligned with the benchmarks. There is at least one item in the book for each assessable benchmark. As such, the book is an **essential teaching resource** for educators interested in preparing their students for the Florida Comprehensive Assessment Test (FCAT). Students will see the book as a helpful **learning tool** to master important mathematics skills.

Using "Successful Test Taking®"

1. After each student receives a Successful Test Taking® Mathematics 8 book, let them know they can write and mark their answers in the book.
2. Use pages 3-5 to discuss preparation and aids to test taking.
3. On page 6, review with your students the strategies for answering multiple-choice and gridded-response items on the Florida Comprehensive Assessment Test.
4. This book is divided into two sessions: Day One and Day Two. You may wish to spend more time and/or days using this book.
5. Have students turn to the 10 Strategies for Successful Test Taking on page 7 and discuss it with them. Then review the General Information for the Student on page 8.
6. Next, have students begin the math items for Day One testing on page 9. Students will continue working until they reach page 27 (item 50).
7. Day Two testing (page 28) will be carried out in the same fashion as Day One, with students working on items 51-100.
8. **Remind students to continue working on the math problems until they reach a stop sign  in their book, at which point students stop.**
9. There are 100 items and 100 possible points in the Mathematics 8 book.



Successful Test Taking[®]
MATHEMATICS 8

Answer Key

Multiple-Choice items are worth.....1 point each
Gridded-Response items are worth.....1 point each
The benchmark for each item is located above each correct answer.

Day One
Pages 9 - 27

1. G.5.1
B 30
2. G.2.3
G 135°
3. A.1.2
B (0, -3)
4. G.2.1 (grid)
1
5. S.3.2
F 17, 18, 33, 34, 35, 36, 37
6. A.6.4
A 15%
7. A.1.5
G $d = 700 - 125t$
8. A.1.1
B 325 miles
9. A.1.1
H 5.6 hours
10. S.3.2
C mean, median, range
only the mode (84) will not be affected; the mean will change from 83.5 to 81.81,
the median from 84.5 to 84, and the range from 20 to 26
11. A.6.1
H 2.66×10^9

What Educators Say About Our Products

"Thank you, thank you for creating an affordable, low-tech, user-friendly set of practice books. We have used the Successful Test Taking series in our district for ... years now and have seen a significant improvement in our overall assessment scores. Not only does this product give excellent and timely practice in age-appropriate test skills, but their use has reduced test anxiety for students and staff."

Becky Stone, Home/School Liaison, Mason County Central Schools

"The information provided from the Successful Test Taking is given in a user-friendly format. It is the first instrument we have seen that breaks down the individual skills that are needed for students to be successful on the assessment. We are very pleased with the STT evaluation. It gives the students an opportunity to duplicate the testing strategies required to be successful on the state assessment."

Gwen Tabb, Director of Human Resources, Waverly Community Schools

"We were not satisfied with our scores in 4th grade. Although we could see the 'target', we needed help in practicing to hit it and assessing how accurate we were. The Successful Test Taking provided the answers we were looking for! Practice in hitting the target was given, an assessment of performance was made, and improvements were put in place that allowed us to hit the target more accurately than we ever have in the history of our school! As a staff, we thank LEADERSHIP RESOURCES for giving our students the opportunity to reach their potential and experience success!"

Jon D. Hoover, former Superintendent, Littlefield Public Schools

"We have been using the Successful Test Taking in our school district for ... years and have been very pleased with the results. Our scores have increased steadily during this time. We have really appreciated the personal service that we have received from LEADERSHIP RESOURCES."

Mary Ruddy, former Principal, Imlay City Community Schools

"We found your book, *Informational Text for Classroom Use*, very useful in teaching our students an array of test taking and informational reading strategies. The activities and readings in this book are closely aligned with our state assessment used by our district, and has also fit well with our state test. We saw a great increase in student achievement in the area of informational reading among our students from using this material."

Kristine Jackson & Roslyn Wikoff, Teachers, Weld County Schools

"We found your Successful Test Taking books to be helpful in preparing students for our state assessment. The books contain test taking strategies, sample items similar to the actual test items, and a review at the end. We believe these books were key in helping children become familiar with the format of the test, and preparing them for lifelong test taking. We would strongly recommend these books to other classroom teachers."

Jennifer Rios & Kelly Seilbach, Weld County Schools

"I ordered your Successful Test Taking for Reading and Math. My colleagues and I were very impressed. We intend to order them again next year. Since we paid for them ourselves, we appreciated the low cost. Your materials are an excellent value for the money!"

Teacher, Taylor Public Schools

"We have used your books - they are very helpful! With these books and a lot of work, our 4th Grade Reading and Math scores SOARED!"

Mary Alice Boone, Teacher, AuTrain-Onata Public Schools

"My school district orders your books for us to use to prepare for our state assessment and to improve strategies. They are user-friendly!"

4th Grade Teacher, Marquette Area Public Schools